

**R E M A R K S**

In the Office Action the Examiner makes reference to 17 Claims. The application was filed with 14 claims therefore the discussion below will refer to the 14 rejected claims and the one added claim.. The Examiner provides a number of rejections and we list them here in the order in which they are addressed:

- I. The Examiner rejects Claims 1-14 under 35 U.S.C. § 102(b), as allegedly being anticipated by Caruso (U.S. Patent 6,043,244).
- II. The Examiner rejects Claims 1-14 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Caruso (U.S. Patent 6,043,244).

**I. The Claims are not Anticipated by Caruso (U.S. Patent 6,043,244)**

**A. The Claims are Not Anticipated**

The Examiner has rejected Claims 1-14 under 35 U.S.C. 102(b) as anticipated by U.S. Patent 6,043,244. The Applicants respectfully disagree. The MPEP states that "to anticipate a claim, the reference must teach *every* element of the claim." Emphasis added, MPEP § 2131. Additionally, "[t]he rule is that the burden of persuasion is on the PTO to show why the applicant is not entitled to a patent." *In re Epstein*, 31 USPQ2d 1817, 1825 (Fed. Cir. 1994) (Plager, J. joined by Cowen, J., concurring.) (citing to *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992) (Plager, J., concurring); *In re Warner*, 379 F.2d 1011, 1016, 154 USPQ 173, 177 (CCPA 1967), *cert. denied*, 389 U.S. 1057(1968)). "[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. If that burden is met, the burden of coming forward with evidence or argument shifts to the applicant . . . . If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent." *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

By the Examiner's own admission, the Caruso reference does not teach every element of the Claims:

"Caruso does not specifically teach the base of DHE or that the formulations are fast dissolve formulations." Office Action dated 06/19/2002, p. 3.

Claim 15 is specifically directed to the fast dissolve formulation embodiment. The Examiner does not appear to address the "pH adjusting agent" element in the Office Action.

Furthermore, the cited prior art reference *requires* the inclusion of a NMDA receptor antagonist in the disclosed formulations. In view of this distinction and in order to advance the Applicant's business interests with respect to particular embodiments, while reserving the right to prosecute similar or identical claims in the future, Claims 1 and 9 have been amended.

No new matter has been added. The "active" and "inactive ingredient" terms of Claim 1 are found in a number of places in the specification. For example, page 5 of the specification (last two lines) notes:

"In one embodiment of the present invention, it is contemplated that DHE is combined with inactive ingredients."

Similarly, the language of Claim 9 is supported in the specification:

"For example, it is contemplated that analgesics or anesthetics may be added to the pharmaceutical preparation."

In view of the above, the rejection should be withdrawn.

## II. The Claims Are Not Obvious

### A. The Examiner Fails to Make a *Prima Facie* Case of Obviousness

The Examiner is reminded that a *prima facie* case of obviousness requires citation to a combination of references which (a) disclose the elements of the claimed invention, (b) suggests or motivates one of skill in the art to combine the elements to yield the claimed combination, and (c) provides a reasonable expectation of success should the claimed combination be carried out. Failure to establish any one of these three requirements precludes a finding of a *prima facie* case of obviousness, and, without more, entitles Applicants to allowance of the claims in issue. *See, e.g., Northern Telecom Inc. v. Datapoint Corp.*, 15 U.S.P.Q.2d 1321, 1323 (Fed. Cir. 1990).

The Applicants respectively submit the Examiner has failed to establish a *prima facie* case of obviousness.

**1. The Examiner Must Point to Evidence**

The requirement that the Examiner make a showing of a suggestion, teaching or motivation is "an essential evidentiary component of an obviousness holding." *C.R. Bard, Inc. v. M3 Sys. Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998). There are three sources for this evidentiary component: the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved. *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573 (Fed. Cir. 1996). The suggestion most often comes from the teachings of the pertinent references. *In re Rouffet*, 149 F.3d 1350, 1359 (Fed. Cir. 1998). Nonetheless, regardless of the source of the requisite evidence, the Examiner's showing "must be clear and particular, and broad conclusory statements...standing alone, are not 'evidence'." *In re Dembiczak*, 175 F.3d 994, 1000 (Fed. Cir. 1999).

It is the Examiner's burden to present "evidence" and this showing must be "clear and particular." *Id.* Importantly, since an Examiner is NOT one skilled in the art (under the law), the Examiner's opinion on what one skilled in the art might believe does not count. *In re Rijckaert*, 9 F.3d 1531, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993) ("[T]he examiner's assumptions do not constitute the disclosure of the prior art"). Of course, if the Examiner has knowledge of relevant facts which are used to make the rejection, the Examiner is free to use those facts - but only if submitted in the form of an affidavit. *See* 37 C.F.R. § 1.107(b). In the present case, the Examiner has submitted no such affidavit.

Indeed, the Examiner has provided only an opinion and perfunctory, conclusory statements - this is not the requisite "evidence" needed to support an obviousness rejection. The Examiner simply asserts that:

"At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use any form of DHE is (sic) a method of treating migraines. It would also be obvious from the teachings of Caruso to formulate and method of delivering the DHE to a host, including fast dissolve formulations." *Office Action dated 6/19/01, p. 3*

The Examiner relies on bald conclusion and does not explain the relationship between the cited reference and a hereto undocumented compound and method for the treatment of migraines.


**2. The Cited References Are Silent Towards the use of an NMDA Receptor Antagonist-Free Formulation of Dihydroergotamine**

In regards to the rejection of Claims 1-14, the cited reference is *completely silent* with respect to any use of an NMDA receptor antagonist-free fast dissolve formulation, as the Examiner admits in the Office Action dated June, 19, 2002 (page 3). This reference, therefore, does not disclose every element in the pending claims and does not provide any motivation for one skilled in the art to create the present invention. Since the Examiner has not met the statutory evidentiary burden, the Applicants respectfully request a withdrawal of this rejection.

**V. CONCLUSION**

Applicants submit the above claim amendments and argument with the belief the pending claims should pass into allowance. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to contact Peter G. Carroll or David J. Wilson collect at (617) 252-3353.

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**APPENDIX I**  
**MARKED-UP VERSION OF REWRITTEN CLAIMS**  
**PURSUANT TO 37 CFR § 1.121 (c)(1)(ii)**

Please cancel Claims 10-11. Please amend the following claim:

1. A method of treating migraines, comprising:
  - a) providing i) a patient having one or more symptoms of a migraine and ii) a formulation [comprising] consisting of one active ingredient and one or more inactive ingredients, wherein said active ingredient is dihydroergotamine;
  - b) administering said formulation to said patient sublingually under conditions such that said one or more symptoms of said migraine are reduced.
  
9. [The] A method of [Claim 1, wherein the method additionally comprises the co-administration of at least one other pharmaceutically accepted compound] treating migraines, comprising:
  - a) providing i) a patient having one or more symptoms of a migraine and ii) a formulation consisting of first and second active ingredients and one or more inactive ingredients, wherein said first active ingredient is dihydroergotamine and said second active ingredient is selected from the group consisting of analgesics and anesthetics;
  - b) administering said formulation to said patient sublingually under conditions such that said one or more symptoms of said migraine are reduced.
  
13. The method of Claim 1, wherein [said formulation additionally] one of said inactive ingredients [comprises at least one] is an effervescent agent.
  
14. The method of Claim 1, wherein [said formulation additionally] one of said inactive ingredients [comprises at least one] is an pH adjusting agent.

**APPENDIX II**  
**CLEAN VERSION OF THE ENTIRE SET OF PENDING CLAIMS**  
**PURSUANT TO 37 CFR § 1.121 (c)(3)**

1. A method of treating migraines, comprising:
  - a) providing i) a patient having one or more symptoms of a migraine and ii) a formulation consisting of one active ingredient and one or more inactive ingredients, wherein said active ingredient is dihydroergotamine;
  - b) administering said formulation to said patient sublingually under conditions such that said one or more symptoms of said migraine are reduced.
2. The method of Claim 1, wherein said dihydroergotamine is a pharmaceutically accepted salt.
3. The method of Claim 1, wherein said dihydroergotamine is a pharmaceutically accepted base.
4. The method of Claim 1, wherein said sublingual administration is via a liquid.
5. The method of Claim 4, wherein said liquid is administered by a spray.
6. The method of Claim 4, wherein said liquid is administered by drop.
7. The method of Claim 1, wherein said sublingual administration is via a paste or gel.
8. The method of Claim 1, wherein said sublingual administration is via a tablet or compressed powder.

9. A method of treating migraines, comprising:
  - a) providing i) a patient having one or more symptoms of a migraine and ii) a formulation consisting of first and second active ingredients and one or more inactive ingredients, wherein said first active ingredient is dihydroergotamine and said second active ingredient is selected from the group consisting of analgesics and anesthetics;
  - b) administering said formulation to said patient sublingually under conditions such that said one or more symptoms of said migraine are reduced.
12. The method of Claim 1, wherein the sublingual administration is via a fast dissolve formulation.
13. The method of Claim 1, wherein one of said inactive ingredients is an effervescent agent.
14. The method of Claim 1, wherein one of said inactive ingredients is an pH adjusting agent.
15. A method of treating migraines, comprising:
  - a) providing i) a patient having one or more symptoms of a migraine and ii) a fast dissolve formulation consisting of one active ingredient and one or more inactive ingredients, wherein said active ingredient is dihydroergotamine one of said inactive ingredients is a pH adjusting agent;
  - b) administering said formulation to said patient sublingually under conditions such that said one or more symptoms of said migraine are reduced.